

Webinar Introduction

Good afternoon. Welcome to our meeting. This is the National Institute of Food and Agriculture, Agriculture and Food Research Initiative 2018 FACT. I wanted to let everybody know this Webinar is being recorded with closed captioning. We anticipate being able to post the recording on our web page within a week or so after this event.

Before we get started, I have a few housekeeping rules that will help make our Webinar run more smoothly. If you can please take a moment to ensure that your phone is muted. We have participants muted on this end. We would like to make sure you are muted completely through the presentation. If you need to leave the Webinar, please hang up. You can always rejoin. But remember if you do, you should insure that your phone is muted. Please do not turn on your video during the Webinar. We don't have enough bandwidth for everybody to be on. If you could keep your video turned off, we would appreciate that. If we can follow those rules we'll be in good shape.

Webinar Agenda

The agenda today is straightforward. There will be a brief presentation of information regarding the FACT initiative. Followed by a question and answer session, in which you'll have an opportunity to ask any questions you might have. The way we'll handle that is to ask you to type your questions in the meeting room chat box. That chat box should be located on the right-hand side of your screen. At the end of the presentation, we'll read each question in the order it was received so all the meeting participants and the group in this room can hear the question. We'll do our best to provide an answer for you.

I'll be providing the presentation today. But I'm in a room with several other FACT team members who will be here listening and available to assist with questions. Before we get into the presentation I'm going to ask several colleagues in the room with me to introduce themselves briefly so you'll know who is here and who is talking with you. I'm Charlotte Kirk Baer.

FACT Presentation

We can move on and start our presentation. What I'll do today is give you an overview starting with some background information. We will talk about proposal types and eligibility. We'll touch on the review process and criteria used in the review. We'll notify you and remind you of key deadlines. At the end of the presentation we'll take questions. If you would like to type your question in the chat box during the presentation that is fine. We'll get to it. We won't answer those until the end of the presentation.

For those of you not familiar with our agency the National Institute of Food and Agriculture is the primarily research agency within the United States Department of Agriculture and reauthorized in the 2008 Farm Bill. It existed under different organizations and names. We administer federal funding in the form of grants to advance agricultural sciences that address issues impacting people's lives and our future. Within our agency we have the flagship competitive grants program, the Agriculture and Food Research Initiative, which was established by Congress in the 2008 Farm Bill. It was reauthorized in 2014. In 2018, we are funded at \$400 million for the entire program. We address research, education, and extension projects across all Farm Bill priority areas. There is plant health, plant

production and products; animal health production and animal products; food safety, nutrition and health; bioenergy, natural resources and environment; agricultural systems and technology; and agricultural economics and rural communities. Those are the six farm bill priorities we address.

What is FACT? It is an agency-wide initiative. It originated in 2016 when we held a data summit to get ideas about what data needs are in agriculture. We held a summit in conjunction with the Midwest big data hub. We also had an online ideas engine where we sought broad input on data science and needs in agriculture. From that we took those ideas from the summit and the idea engine and put a request out in 2017 for workshop proposals to delve into the needs identified by stakeholders. We funded 12 workshops in 2017. They were in a broad range of topics dealing in everything from data to remote sensing data to publication data and information science.

From what we have learned again through those workshops we have refined what we believe is a nice, broad request for applications in this area. And that is what makes up our opportunities that we have in the food research request for proposals for FACT. There are opportunities throughout the Foundational and Applied Science Request for Applications and the Education and Workforce Development Request for Applications.

With the Education and Workforce Development Request for Applications there is a program area in there entitled Research and Extension Experiences for Undergraduates. That program we won't focus on today. That was issued back in April. There have been outreach efforts on that. Their deadline for submission of applications is tomorrow.

What we will be focusing on today is the Foundational and Applied Science Request for Applications. Again, there are opportunities for FACT across all the program areas and farm bill priorities. There is a FACT program area priority in the Ag systems technology portion in this request for applications. There are two other places for applications requesting FACT-like activities. That is in the agricultural economics and rural communities area. That is focused on big data and food and agriculture. Also, there are solicitations in the bioenergy, natural resources and environment program area. Projects are solicited for networks and data sharing and management. Those are more focused areas. They are all related to FACT. Those are opportunities in the requests for applications.

With regard to the grant types we are requesting, there are three. There are standard grants, conference grants, and Food and Agricultural Science Enhancement grants. Each is different.

The standard grant is targeting original scientific research and/or integrated projects. The conference grants are available to bring together people to identify needs or update information or advance this area of science. Finally, the FASE grants are to enhance Institutional capacity and there are eligibility requirements associated with those. Those are outlined in the request for applications. In addition to that there are new investigator opportunities. Those are the grant types that are solicited through this call.

In terms of the project types, there are two types of projects that we are soliciting here. One is research projects and the other is integrated projects. Integrated is defined as research, education and/or extension, but two of those have to exist. With regard to eligibility for those project types. For single function research projects there is a list of entities that are eligible to apply for those. Those include state and agriculture experiment stations, colleges and universities, university research

foundations, other research institutions or corporations, individuals who are U.S. citizens, nationals or permanent residents, any group consisting of two or more of those. Foreign and international organizations are not eligible to apply. That has broad eligibility with the exception of foreign or international organizations. With regard to integrated projects -- and this is important -- colleges and universities are the only eligible applicants. Please make sure that you pay attention to that. We get a lot of questions on that. Integrated projects have more restricted eligibility.

With regard to budget for this program area priority, project budgets for research and integrated projects can be requested up to \$500,000 for up to four years in length. The coordinated innovation network projects budget is up to \$1 million for a period up to five years. There are two level of funding in this program area in addition to conference grants, which can be requested for up to \$50,000.

With regard to the priorities for our research and integrated projects, the priorities we are seeking and what we hope that project will focus on come from the stakeholder input that we have collected over the past several years. They fall into four different areas.

The first is data design and implementation. We are looking for a project that will build scalable data and infrastructure management systems or address those issues. Projects that show the fair principles for data. Findable, accessible, interoperable and reusable. And/or develop standards and best practices data and its implementation.

The second area is the analytics area. We would like for projects to develop data integration and data quality tools, new algorithms and methods for analyzing and interpreting big data, build integrated system models to facilitate dialog and cross collaboration across disciplines.

The third area that we are interested in is technologies. Technologies specifically to connect multiscale data on bridge realtime distributed in parallel systems, creating frame works for track and processing data and new technological approaches for data archiving and sharing.

In the fourth area, we deal with the human piece of this. That's the applications and human interactions. We are interested in projects that address human interactions with data and systems: data visualization for analysis and discovery; helping humans learn to see data and discover and analyze it; engaging students in academics and professionals in public and private sector; decision support tools and big data analytics for U.S. agriculture.

Those are the priority areas that we are really looking for our projects, research and integrated.

With regard to the network, we have a list of things here that we'd like to pursue and receive projects that address things like building cohesive multidisciplinary communities that address bottlenecks. There is more detail in the request for applications about these. I have kind of summarized them here. The second is synergistic activities to develop data standards. Building communities working on multiple aspects of data-supported problems that result in a multidisciplinary network solution. We are interested in networks among public and private entities from relevant disciplines. We'd like projects that promote collaboration among research and education, leveraging domestic and international entities to sharing in expertise and resources. We'd like applications that address networking strategies to connect the public and private sectors, students and those in societal engagement. Those are the list of things we are looking for. We would like for projects to address as many of those as possible. We recognize it may not be possible to address all. Those are what we are seeking.

With regard how to submit to this program area of priority. A letter of intent is a prerequisite for submission of a FACT proposal. The link will give you detailed instructions on how to put your letter of intent together and what information needs to be in it and the format it needs to be in and where it needs to be submitted. Please follow those instructions carefully. They are there for a reason. They are detailed. For example, we require a PDF. If you send a word document, it won't fly. We want to make sure you submit them in the proper format in the proper place. We have a special e-mail we are dedicating to receive those. You'll receive an e-mail either discouraging or encouraging a submission or proposal. I want to make it clear if you have discouraged from submitting a proposal you are still allowed to submit a proposal. You may not submit a proposal if you don't submit a letter of intent. The deadline for letters of intent is July 25th. That's about a month away from now. Please don't miss that deadline. We can not go back and allow late submissions. The deadline is the deadline.

If you are encouraged to submit a proposal, your full application will be due on October 31, 2018. Again, that deadline is firm. It is very important that you don't wait until the last minute to submit either the letter of intent or the proposal.

What makes for a successful proposal? These are just high-level things here. Things that you should think about as you are putting your proposal together are the basics. You need to meet the deadlines. You need to meet format requirements. You need to read the request for applications and be sure that you have included all the required components of the proposal. Finally make a compelling case for what it is that you are proposing to do. You want your proposal to be responsive to evaluation criteria. In general, the evaluation criteria focus on three things regardless of whether it is a research-only proposal or an integrated network proposal. Evaluation centers around three different components. The first is scientific merit. Again, I paraphrase here the evaluation criteria, it can be found on our website in PDF format. I would encourage you to read through those very carefully. In terms of scientific merit we want to make sure you have clear objectives and outcomes. That your approach and methods are innovative, original and appropriate. We want you to fill knowledge gaps that address the problems we have raised here. Your proposal may lead to changes in learning, actions or conditions for stakeholders. Proposals are clearly identified and defined. The roles of the people involved in the project and whether there is adequate expertise to conduct the project and whether resource allocations are clear. Finally, with regard to relevance, the proposal needs to address the priorities I went through a little bit earlier. Also that they align with Farm Bill priorities and USDA strategic goals. You'll want to take a look at those. Research or extension products will be accessible to stakeholders. Those are a broad overview of the evaluation criteria used to evaluate proposals.

If you are looking for more information we have a FACT web page dedicated to this program area of priorities. It is new for us. You can access that. On that page, in addition to a lot of other information, there is a list of frequently asked questions. We will update those as we determine we need to so that you can get answers to questions online, too.

With that -- that is the high level overview. We wanted to introduce you to this new initiative and we are very happy that we have so many of you on the lines.

Questions and Answer Session

What we'd like to do now is to answer any questions that you might have. Again, if you would type your questions in the chat box. We'll do our best to answer those.

The first question is would work on the developing and playing advance wireless and infrastructure reveal realtime and long term data be of interest of the FACT program? It is also up on the screen. I would ask people in the chat, I think the setting is set for the host. When you put in the questions make sure you send it to everyone and not just the host.

Would work on developing and deploying advance wireless network infrastructure reveal remote farms be of interest of the FACT program? Yes. We think so. You need submit a letter of intent and we'll look at it for what you are doing. Don't take what we say here and run with it. You have the requirement to submit an LOI. That will be evaluated for the food ability to the program.

Let me remind you to mute your phones.

Are there any limits for the number of proposals that can be submitted? We would like for you to submit your best ideas. We discouraging multiple submissions to the same program. I encourage you to put forth your strongest proposal. However, you can be a coPI on a separate proposal to the same program. But you don't want to be submitting the same proposal to two different programs. We strongly encourage you to only submit one proposal to a program.

Should we apply for AST/AERC program and submit FACT LOI or does applying to FACT preclude application to standard program requests? There is a little bit of confusion in the RFA about that. If you are submitting a proposal to the Agriculture Economics and Rural Communities program on big data, you are not required to submit an LOI to that program. Let me repeat the Agriculture Economics and Rural Communities program on big data does not require a letter of intent.

Is this likely to be a one-time call for proposals or will it be reiterated in coming years? Can't really answer that until we receive our appropriations and we know what we can put together. We can't go beyond what we have presented this year.

Is the funding \$500,000 per year or is that the amount for four years? That's the total amount. It can be up to a four-year project. That is the total amount if it was a four-year project -- if you chose to conduct a four-year project the total is \$500,000 over the period of four years. That includes any indirect costs.

Next question. Are the slides for the presentation available? We will be recording this Webinar and the recording will be up posted on our FACT web page. You will have access to what has been presented here and just after that, it should be up on the website in about a week's time. If you need the slides before then you can contact Charlotte or any of the other FACT team members and they should be able to provide it for you. I think all of that information regarding contacts is in the RFA.

The next question is how many awards do you anticipate making? That is a little difficult to say. Again, the FACT initiative runs across all program areas. Gosh -- probably within the realm of anywhere between 12 -- and it depends whether or not they are network awards or project award. Probably just a handful of network awards. There is \$10 to \$15 million available across all the programs and the FACT program in particular, which could mean as much as 30 awards -- probably fewer overall. Again, as Charlotte suggested it depends on the distribution between the projects themselves and the coordinated networks. We intend to fund a maximum of four to five networks.

Okay, the next question; the request for proposals states a focus on fundamental and analytics and tool development. This sounds like CS, English, math, science without ag application. These proposals must address farm bill priorities. There has to be an agricultural goal or element to the project.

The next question, the animal health priority code has a deadline of July 27th but the LOI for FACT is July 25th. Should we apply to A1541 or A1211? I think you'll have to look at the program and decide which program is best suited for you. Again, I have listed all of our program contact information so that you can give us a call if you are having doubts or you can't decide. I recognize that the LOI for FACT is later than some of the application deadlines. That will require that you make a decision as to which program you would like to pursue. We are available and have been taking calls and requests from interested applicants to help you identify where your project might best fit. I would suggest you contact one of us or the program contact for animal health.

Next question. Can you provide more details about the coordinated innovation network? Without knowing exactly what you are looking for -- we are hoping to bring together multiple disciplines to tackle big problems and resolve bottlenecks that may exist. The networks are really intended to bring together disciplines that may not typically work together or entities that may typically not have to opportunity to work together.

Next question. Corporations can apply -- is this new? Eligibility for corporations to apply is not new. Integrated projects must be colleges and universities.

Could you go into a bit more detail on the primary distinctions between the BNRE networks for program area and FACT? Yes. The BNRE is looking for projects that integrate data sets. They are looking to promote data sharing and better use of data with an outcome of building networks. Their primary focus is to improve data sharing. If anyone else has any comments -- the program leader for that doesn't happen to be in the room. You may want to contact her. There is that distinction between what they are looking for and what FACT is. FACT is a little bit more broad. They are encouraging activities that focus on integrating data sets and data sharing, and it is more natural resource oriented in soils and water quantity and quality. In forestry, they have specific areas they would like for you to focus in.

The next question is is the FACT program a recurring program? Is it available next year? Again, we won't be able to answer that until we have our appropriations and know what we will be requesting.

What is the definition of a new investigator mentioned in the FACT program? A new investigator is anyone who is within five years of having received their terminal degree and has not previously been awarded any federal grant from any federal agency.

If you are a coPI on a federal project, does that disqualify you from a new investigator? No. It is the primary investigator that matters.

Next question. The networks programs sound suitable for integrated project and work with private sector but only universities are eligible. Can they collaborate with private sectors for integrated projects? Yes.

The next question. Can you talk a bit more about funding for either undergraduate or graduate educational initiatives? Research and extension experience that would be data science specific. Most

of that would be handled through our Education and Workforce Development area. That call has been out since April. Those applications are due tomorrow. If you are interested in that, you may want to contact -- the information is available in this presentation.

The next question. Will the program infrastructure serve as data computation? Sorry, we had a little technical difficulty. With regard to infrastructure, we support activities surrounding the development of infrastructure. There is funding available for equipment both in the project proposals and we have equipment grants. I would encourage you to look through what is in the request for applications with regard to limits. Limits on funding and limits on usage of the type of equipment that we do support. Yes, there is a possibility and we certainly do support the activities that promote infrastructure.

Someone also mentioned FACT is in the budget request for FYI '19. Pending appropriations the program should be offered, correct.

The next question is the network award for four to five years maximum? The maximum is five years for network, if I understood the question correctly.

Would new investigators be considered on a different category for competition? No. All the proposals are valued the same for quality and all the other criteria. The benefit of indicating -- as a new investigator -- is that at the margin we give preference to new investigators and other phase-type awards -- the science enhancement grant. What are the types? Quickly, we provide preference to minority serving institutions, 1890 institutions and small and mid-sized institutions, which have students below a certain threshold of 17,500 or something like that. That information is in the RFA. You'll want to look at the RFA for that. The point is certain institutions are -- institutions of those type are eligible for these FASE awards. We have a certain percentage of the funds set aside to provide support for those types of institutions. Again, all proposals are evaluated under the same criteria. It is just those get preference. Additionally, the types of grants that are available are sabbatical and seed awards. There is also standard strengthening.

Correct. Do you want to talk about EPSCoR? It is a number of states listed in the RFA. Those states are the lower number of awards. Those states -- you'll want to look at those. Those are included in the RFA under the FASE information.

Can we have various type of network projects funded through different programs.

Next question, will there be an NSF review process for the submitted proposals alongside the ranking of the proposals? In essence, what is our review process? I mean, the basic process is -- after proposals are submitted and we determine that they have met all the criteria for submission, then we have them reviewed by a panel. A panel ranks them according to -- based on quality and other criteria. We rank them on priority for funding. Typically, we really don't know what to expect with this program because it is new. Most of the programs have a success rate around 10 to 15%. Some lower. I think additional funds have brought the average success rate up. We are looking. Whatever the number is we look to support 20%. Our review process -- we don't anticipate to deviate from the typical process from these areas.

Do you want do mention ad hoc reviewers? Again, when we put panels together we make sure we have the appropriate balance and type of expertise on the panel. If it is determined that we don't have that, we can reach out to ad hoc reviewers. That is a standard process that we use across programs.

This program will not be different from that. I would add if you are interested in serving on one of these panels you can't serve on the panel if you are putting in a proposal -- but if you are interested contact the appropriate NPL. We are always looking for panelists.

The next question: I apologize I lost my place here. Yes, FACT does it include aquaculture species and data.

Can you elaborate on cost sharing? There are no cost sharing requirements associated with this program. I'm not sure what you are referring to. The short answer is there are no cost-sharing or matching requirements associated with the FACT program. The only time which there are matching requirements is if you are seeking to do research on a very, very narrow -- like a single species -- which is probably not a factor here. Or highly location-specific. If you are looking at a small part of a state. The program is a national program, it is intended to have that type of scope. I don't anticipate that it would be an issue with this program.

Will a FACT focus also go into national higher educational challenge grants? We can't anticipate whether it will.

When would successful awards start? Well, proposals are due October 31st. In general, we try to get them reviewed and awarded as quickly as possible, but that can take time. With regard to a starting date, you can think about six months from the time that you submitted your proposal. Around that time.

Next question. Could a university submit a proposal to network program as a PI with a commercial collaborator? Yes.

I think we are caught up on questions at the moment. If anyone else has questions please put them into the chat. We are going to stay on the phone and online for a little while in case any more questions come up. If you think of questions later on after this meeting has ended, the NPL's are more than happy to take questions. They are there to help you. You can find their e-mails in the RFA.

To reiterate a point, serving as a reviewer on a panel is an excellent way to get a feel for the process and what a good proposal looks like. If you are interested in that this time around, please feel free to indicate your interest and send your CV so we can see how you might fit with this program.

I know Charlotte mentioned earlier about submitting PDF's and making sure you have time. If you submit after 5:00 eastern time we cannot take it. Make sure you give yourself plenty of time in case something goes wrong. If you are submitting in anything other than PDF, our system doesn't take it. You can't send it to us personally. It has to go into grants.gov. It is the only way to get into the system.

The funding rate depends on the number of proposals we receive. Another question, can postdocs be proposal leads? Yes, but typically these programs are quite competitive. Yes, you are certainly welcome to submit a proposal.

We are caught up with the questions. We'll go on mute. If you have questions feel free to put them in the chat. We'll be here until 2:55. If we don't get any questions until then, we are probably going to sign off. The Webinar slides will be available. If you need them immediately, Charlotte would be the best person to contact for that. We'll post a recording of the Webinar on to the FACT website roughly a week from today.

Another question came in. Could you please elaborate on the requirement of U.S. citizenship and/or residents for PI or coPI? The institution has to be a U.S. institution. That is a main requirement. And a PI, as well. However, you can be a coPI as a noncitizen or a resident. Is that correct? Actually not. Just to reiterate. The answer to that question, as long as the institution is eligible the PI or co-PI does not need to be a U.S. citizen.

Another question. Can the project be a single PI proposal? Yes.

Another question. Does the project have to have real world evaluation? So the answer to that is it does not have to have real world evaluation. The way we are taking that to mean can it be a theoretical proposal. If that is not the question can you please clarify that for us. Yes, this program supports research and applied science. Also given this is a USDA funding program. It must show signs of relevance to the future of agriculture in the approved application. If that didn't answer the question let us know. We are caught up with questions so I'm going to put us on mute again.

The next question that came in is what is the page limit for a proposal? That information is all in the request for applications. But for these I believe it is 18 pages. It actually differs depending on the type of proposal you are submitting. For example, I believe -- depends on what you are submitting. We have come up on the hour. We are going to be closing the Webinar. Again, every one of the national program leaders associated with the the FACT initiative is more than willing to help answer any future questions you might have. If you would like to let people know about the Webinar it will be posted on our website in a week. You can get a refresher there. Let us know if you have future questions. Contact us directly. We hope you'll apply.

Thank you very much.